Do drug advertisements in Russian medical journals provide essential information for safe prescribing?

ABSTRACT ● **Objective** To examine pharmaceutical advertisements in medical journals for their adequacy of information. ● **Methods** We selected a convenience sample of 5 major Russian medical journals covering different fields of medicine and different types of publications. We evaluated all the ads in all the issues of the selected journals published during 1998. We counted the number of appearances of trade, chemical, and generic names; indication and contraindication; pharmacologic group; safety warnings; and references. Counts in all categories were aggregated for each advertiser. ● **Results** There were 397 placements of 207 distinct advertisements. Only 154 placements (40%) mentioned the generic name, 177 (45%) mentioned any indication, 42 (11%) mentioned safety warnings and contraindications, 21 (5%) warned about drug interactions, and 8 (2%) provided references. The 6 companies responsible for the most ads on average provided less information than the other companies. ● **Conclusions** Almost none of the drug ads published in Russian medical journals provide the basic information required for appropriate prescribing. This is despite the fact that in Russia, ads that omit essential information and that could lead consumers to misunderstandings about an advertised product are illegal. The arrival of drug advertising in Russia has brought little information and has been potentially damaging.

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During the Soviet era, Russian citizens, including physicians, were unacquainted with advertising. The only exception was the slogan, "Fly by Aeroflot's planes!" although there was only 1 airline to choose from. Medical journals did not publish advertisements, and there were no "free" industry-funded publications. Since perestroika, all sectors of Russian society have been exposed to all kinds of advertising. This has occurred in the following context:

- Neither physicians nor the public have received education in the skills and skepticism required to avoid being misled by sales promotions (see the statement posted in 1999 by the Russian Society for Education and Help at http://agaton.sgu.ru)
- Before 1992, there was no regulation of advertising. Between 1992 and 1995, a presidential decree covered advertising generally, and after 1995, a federal law replaced the decree. Despite that law, no visible action has been taken against illegal (ie, misleading) drug ads
- Because of lack of financial resources, regional leaders are unable to regulate advertising, including the advertising of tobacco in the streets

Summary points

- Almost none of the drug advertisements used in Russia provide the basic information required for appropriate prescribing
- Even the low standards allowed by the International Federation of Pharmaceutical Manufacturers Association's code are rarely achieved in Russia
- The internal guidelines for advertising of multinational companies such as Rhone-Poulenc Rorer, Hoffmann-La Roche, and Servier are not effective
- Russia has not been able to enforce laws on advertising standards
- The arrival of drug advertising in Russia does little to inform the medical profession or the public and may be misleading

- Low incomes make medical specialists vulnerable to the temptation to use their influence for drug promotion, to direct sales from physicians to patients, and to accept rewards for prescribing drugs

Regulations in developed countries mandate that journal advertisements for drugs must provide sufficient, reliable information for physicians to use the medications appropriately. Accurate prescribing information in ads takes on special importance in countries where physicians have limited access to other sources of information. Over the past 20 years, studies in countries with limited regulatory infrastructure have found that pharmaceutical ads supply little information in the countries where information is most needed (see this article at www.ewjm.com for Appendix). The situation in post-Soviet Russia parallels that in many developing countries: government regulations are weak, and scientific information is scarce.

Up to now, there has been no investigation into the quality of drug ads in post-Soviet Russia. This study was stimulated by the recent example of oversimplified promotion of Atrovent (ipratropium bromide) as the "first move" for "chronic bronchitis." Boehringer Ingelheim's ad disclosed no safety warnings, contraindications, or alternatives, such as quitting tobacco use.[1] Based on our knowledge of drug advertising, the Atrovent example, and the situation in Russia, we hypothesized that the quality of information in drug advertising directed to Russian physicians would be poor.

METHODS

A convenience sample of the following major Russian medical journals was selected:

- *Russkii Meditsinskii Zhurnal* ["Russian Medical Journal"]—22 issues and 6 supplements; this "free" journal is funded by advertising
- *Khirurgiia* ["Surgery"]—12 issues
- *Kardiologiia* ["Cardiology"]—12 issues
- *Klinicheskaia Meditsina* ["Clinical Medicine"]—12 issues; covers general practice and internal medicine
- *Mezhdunarodnii Zhurnal Meditsinskoi Praktiki* [Russian version of "Evidence-Based Medicine"]—7 issues

The sample was selected to cover different fields of medicine, different types of publications, and different publishers. These journals are considered to be opinion leaders and are among the most widely circulated medical journals in Russia. All of the selected journals are based in Moscow, but that is typical for Russia since the Soviet era.

All the ads in all the issues of the selected journals published during 1998 were evaluated. A standardized data abstraction form was used to record the information.

We recorded trade names for pharmaceutical products (single drugs or drug combinations) in all the ads placed by each advertiser, distinct ads in which either the text or the picture used differed from any other ad, placements of ads by each advertiser (separate appearances in journals of the distinct ad), the generic name, the chemical name, the indication, the pharmacologic group (eg, β-blocker), any contraindication, any safety warning or side effect, any warnings of adverse interactions, and any references to published material.

In making these assessments, we did not attempt to determine if the information provided in the ad was accurate. Counts in all categories were aggregated for each advertiser. Data were extracted by a single assessor (A V). During the pilot stage of this project, her evaluations were rechecked by 1 of us (V V), and there was close agreement between the 2 raters. For the main part of the study, 1 of us (V V) blindly rechecked the evaluations in the *Mezhdunarodnii Zhurnal Meditsinskoi Praktiki,* and once again there was a high rate of agreement (eg, for generic name, 35/36, κ=0.93; for indication, 33/36, κ=0.77; and for contraindications, 35/36, κ=0.84).

As with all international trade with Russia, pharmaceutical importing was severely damaged by the economic crisis of August 17, 1998. However, we did not observe any changes in the number or type of pharmaceutical ads during the study period (January-December 1998 inclusive), presumably because ads were prebooked and prepaid earlier, and they are usually repeated unchanged for 2 or more years. Since January 1999, many medical journals, including those evaluated in this study, have had a reduction in size, frequency, or both. Some journals have ceased publication entirely.

RESULTS

The results of the study are presented in the table, with advertisers ranked in order of the number of placements of ads in the sample. There were 397 placements of 207 distinct advertisements. The top 6 advertisers placed more than 40% (n=163), and the other 47 companies contributed the rest. (None of these 47 had more than 5% of the placements.) Of the 397 ads that we studied, only 154 (39%) mentioned the generic name, just 177 (45%) mentioned any indication, and 95 (24%) mentioned more than 1 indication. Other information was provided even less frequently: safety warnings and contraindications (11%), drug interactions (5%), and references (2%). Because no ad appeared more than 15 times, a single "bad" ad could not have seriously biased the results.

Because the top 6 companies placed a proportionately greater number of ads than the others, the content of their ads was analyzed separately. On average, they provided less information than the other companies in almost every category, and for generic name, the difference was statistically significant (t test, P<0.01).

Table 1 *Information provided in drug advertisements in Russian medical journals*

Advertiser	Pharmaceutical products, no.	Distinct ads, no.	Placements, no.	Generic name given, no. (%)*	Chemical name given, no. (%)*	Indication given, no. (%)*	Pharmacologic group given, no. (%)*	Contraindications, no. (%)*	Safety warnings, no. (%)*	Interactions, no. (%)*	References, no. (%)*
Egis, Hungary	10	9	35	5 (14)	1 (3)	5 (14)	3 (9)	0	0	0	0
Rhone-Poulenc Rorer	14	14	31	10 (32)	4 (13)	11 (35)	7 (23)	2 (6)	1 (3)	0	0
Hoffmann-La Roche	15	10	30	15 (50)	15 (50)	9 (30)	4 (13)	5 (17)	2 (7)	0	0
Hemofarm, Yugoslavia	13	14	25	3 (12)	1 (4)	14 (56)	5 (20)	0	0	0	0
Servier	8	9	22	8 (36)	4 (18)	8 (36)	6 (27)	5 (23)	5 (23)	2 (9)	3 (14)
KRKA, Slovenia	6	7	20	6 (30)	0	7 (35)	7 (35)	5 (25)	5 (25)	2 (10)	0
Subtotal	66	63	163	47 (29)	10 (6)	60 (37)	37 (23)	16 (10)	16 (10)	6 (4)	3 (2)
All other advertisers (n = 47)	168	144	234	107 (46)	21 (9)	117 (50)	80 (34)	26 (11)	28 (12)	15 (6)	5 (2)
Total	234	207	397	154 (39)	31 (8)	177 (45)	117 (29)	42 (11)	44 (11)	21 (5)	8 (2)

*Percentage indicates the percentage of all ad placements for that advertiser.

Some ads mentioned more than 1 pharmaceutical product. For example, Gedeon Richter cited as many as 8 pharmaceutical products in 1 distinct ad, Hoffmann-La Roche as many as 7 pharmaceutical products, and Hemofarm of Yugoslavia as many as 5 pharmaceutical products. In many cases, the pharmaceutical products mentioned together had nothing in common except the manufacturer, and instead of listing indications, some disclosed only the pharmacologic group. A few ads provided no written information except for the product's trade name (eg, Egis's ad for Coverex [perindopril erbumine] showed only the images of Russian knights and 3 fighter aircraft). An ad for Prozac (fluoxetine) mentioned only the main indication and not the name of the manufacturer (Eli Lilly).

Few ads promised additional information on request. However, Jelfa's ads (unlike all the others) always stated, "for full information, see the product information leaflet." Servier's ad for Prestarium (perindopril) and Preductal (trimetazidine) were the only ads (2/207 distinct ads in this study) that provided the amount of information usually seen in advertising in major international medical journals.

Finally, we observed some promotional methods that we have not seen anywhere else. For example, Searle invited readers to take part in a competition for the best writing about its drugs.

DISCUSSION

Few of the drug ads published in Russia provide the basic information required for appropriate prescribing. This is despite the fact that in Russia, advertisements that omit essential information and so could mislead consumers about an advertised product are illegal.[2] Pharmaceutical company staff may genuinely believe claims that are unjustified, but it is unlikely that they could innocently misunderstand the need for basic drug information in their ads. Apparently pharmaceutical companies will not provide the information required for the appropriate use of their products unless forced to do so. Clearly, laws alone are not enough. Effective regulatory systems are needed.[3]

The International Federation of Pharmaceutical Manufacturers Association (IFPMA) asserts[4]

> Self-regulation, through the IFPMA Code of Pharmaceutical Marketing Practices, backed up by national association codes and the internal guidelines of multinational companies, provides an efficient and cost-effective mechanism for imposing standards for advertising and promotional practices.

The IFPMA code of pharmaceutical marketing practices[5] allows lower standards than the World Health Organization (WHO) criteria for ethical pharmaceutical promotion.[6] The minimum requirements of the IFPMA code for advertisements are that they disclose the brand name, an approved name, the name and address of the company or its agent responsible for marketing the product, a simple statement of indications, and wording that clearly indicates that further information is available on request.

In addition to these requirements, WHO also specifies that advertisements should contain side effects and major adverse drug reactions; precautions, contraindications, and warnings; major interactions; and reference to scientific literature where appropriate.

Even the low standards of the IFPMA code are rarely achieved in Russia. The internal guidelines of multinational companies such as Rhone-Poulenc Rorer, Hoffmann-La Roche, and Servier are not in effect in Russia. The Russian pharmaceutical association has a code of ethics, but it has no provisions governing the content of drug ads.[7]

The quality of journal advertising that we have documented in Russia is not unique to that country. As we noted in the introduction, similar findings have been observed during the past 20 years in many developing countries (see this article at www.ewjm.com for Appendix). Even in developed countries, where controls are stricter and resources more plentiful, there are serious problems with journal advertising.[8,9]

Obviously, the publication of low-quality advertisements contradicts the policy of pharmaceutical companies and potentially harms their image among physicians. The question then becomes why this practice continues unabated. We can think of several possible explanations, which are not mutually exclusive. One is that physicians are not trained to evaluate drug ads and do not recognize the problems with many of them. Another possibility is that penalties for violating marketing codes are insufficient to deter companies from adhering to their requirements. The lack of serious sanctions is a characteristic of self-regulatory systems of advertising control.[10] Finally, even if physicians are cognizant of poor advertising, it would take collective action to translate this knowledge into something like a boycott of a company's products, and physicians may lack the organizational capacity to undertake such a venture. Boycotts may also be impractical if there is no replacement for the company's product.

The need for effective control over promotion is universal. Studies in western Europe and North America have shown that even where objective sources of prescribing information are relatively easy to obtain, physicians are still vulnerable to messages in promotional material.[11,12] In countries like Russia, where access to scientifically based information is severely limited even in university and hospital libraries, the situation is even more dangerous.

The arrival of drug advertising in Russia has brought little information and has been potentially damaging for not only practitioners and their patients but also scientists and journals. Medical scientists have started to produce many uncontrolled trials of new drugs, usually on small numbers of patients. These articles meet key standards required for effective advertising[13] by incorporating an advertising style and including the trade name and the name of the manufacturer in the title and the telephone number of the distributor in the text.[14-16] Medical journals faced with severe financial constraints willingly accept these articles and the poor-quality advertising that seems to accompany them.

Under the "free-market" system, pharmaceutical companies are rewarded for promotion that increases sales volume, prices, or both, regardless of the possible effects on prescribing and health care outcomes. Companies are sometimes accused of double standards. However, the "tyranny of the bottom line"[17] seems to lead many to sink to whatever standard they can get away with in each market. Pharmaceutical companies appear to be exploiting Russia's lack of defenses for short-term gain at the expense of health care in Russia.

Authors: V V designed the study, checked the data, and wrote most of the report. P M and J L clarified the English and contributed international context to the introduction and discussion sections. A V collected the data, suggested changes to the design during the pilot, and produced the final data summary.

References

1 Vlassov VV, Mansfield PR, Lexchin J. Atrovent is advertised as first line treatment for chronic bronchitis in Russia. Medical Lobby for Appropriate Marketing 1999;17(5/6). Available at www.camtech.net.au/malam/editions/IN9905. Accessed March 27, 2001.
2 [On advertising. Federal law of Russian federation] (July 18, 1995, no. 108 FZ). *Sobranie Zakonov Ros Feder [Archives of Laws of Russian Federation]* 1995;30:2864.
3 Ayres I, Braithwaite J. *Responsive Regulation: Transcending the Deregulation Debate.* New York: Oxford University Press; 1992.
4 International Federation of Pharmaceutical Manufacturers Association. Self-regulation of marketing practices. Available at www.ifpma.org/ifpma8a.html#Marketing. Accessed March 22, 2001.
5 International Federation of Pharmaceutical Manufacturers Association. IFPMA code of pharmaceutical marketing practices. Available at www.ifpma.org/ifpma4. Accessed March 22, 2001.
6 Ethical Criteria for Medicinal Drug Promotion. Geneva: World Health Organization; 1998. ISBN 92 4 154239X Available at www.who.int/medicines/docs/criteriamedicinal.doc. Accessed March 30, 2001.
7 Ethical code of the pharmaceutical specialist. *Med Gazeta* 1997 Feb 19. no. 148-8.
8 Lexchin J, Holbrook A. Methodologic quality and relevance of references in pharmaceutical advertisements in a Canadian medical journal. *CMAJ* 1994;151:47-54.
9 Wilkes MS, Doblin BH, Shapiro MF. Pharmaceutical advertisements in leading medical journals: experts' assessments. *Ann Intern Med* 1992;116:912-919.
10 Lexchin J, Kawachi I. The self-regulation of pharmaceutical marketing: initiatives for reform. In: Davis P, ed. *Contested Ground: Public Purpose and Private Interest in the Regulation of Prescription Drugs.* New York: Oxford University Press; 1996:221-235.
11 Greenwood J. *Pharmaceutical Representatives and the Prescribing of Drugs By Family Doctors* [dissertation]. Nottingham, UK: Nottingham University; 1989.
12 Avorn J, Chen M, Hartley R. Scientific versus commercial sources of influence on the prescribing behavior of physicians. *Am J Med* 1982;73:4-8.
13 Ogilvy D. *Ogilvy on Advertising.* London: Pan; 1983, and Prion; 1995.
14 Rumiantsev AG, Aldonina VV, Il'ina TP, Snitsarenko VI, Biriuchinskaia IG, Shevaldina TV. [Trial of a long-acting preparation Coldact from the firm Natko to treat upper respiratory tract diseases in polyclinics.] *Klin Med* 1993;71:67-68. [Russian]
15 Rumiantsev AG, Aldonina VV, Il'ina TP, Snitsarenko VI, Biriuchinskaia IG, Shevaldina TV. [A trial of the use of the prolonged-action preparation Koldakt from the firm Natko for treating upper respiratory tract diseases in polyclinics.] *Ter Arkh* 1993;65:70, 72. [Russian]
16 Rumiantsev AG, Aldonina VV, Il'ina TP, Snitsarenko VI, Biriuchinskaia IG, Shevaldina TV. [Use of Coldact, a long-acting preparation of Natko, for the treatment of upper respiratory tract diseases in outpatient clinics.] *Klin Med (Mosk)* 1994;72:60-61. [Russian]
17 Estes R. *Tyranny of the Bottom Line: Why Corporations Make Good People Do Bad Things.* San Francisco: Berrett-Koehler Publishers; 1996.